

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>WA 2650-04WO</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/003151</b>	International filing date (day/month/year) <b>25.03.2004</b>	Priority date (day/month/year) <b>09.07.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>B60L11/18</b>		
Applicant <b>WOBBEN, Aloys</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <b>14</b> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <b>3</b> sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input checked="" type="checkbox"/> Box No. II Priority <input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input checked="" type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input checked="" type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
    - ☐ international search (Rule 12.3 and 23.1(b))
    - ☐ publication of the international application (Rule 12.4)
    - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☐ the international application as originally filed/furnished
  - ☒ the description:
    - pages 1-12 \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☒ the claims:
    - nos. 1-15 \_\_\_\_\_ as originally filed/furnished
    - nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☒ the drawings:
    - sheets 1/3-3/3 \_\_\_\_\_ as originally filed/furnished
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. II

Priority

1. ☒ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☒ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 5, 8, 10, 11, 14

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 5, 8, 10, 11, 14

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

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Box No. IV

Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
  - ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☒ neither restricted the claims nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with.
  - ☒ not complied with for the following reasons:

**See Supplemental Box**

4. Consequently, this report has been established in respect of the following parts of the international application:

- ☐ all parts.
- ☒ the parts relating to claims Nos. 1-4, 6, 7, 9, 12, 13, 15

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims		YES
	Claims	1-4, 6, 7, 9, 12, 13, 15	NO
Inventive step (IS)	Claims		YES
	Claims	1-4, 6, 7, 9, 12, 13, 15	NO
Industrial applicability (IA)	Claims	1-4, 6, 7, 9, 12, 13, 15	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. This report makes reference to the following documents:			
D1: US 5 642 270 A (GREEN ROSS MARTIN ET AL) 24 June 1997 (1997-06-24)			
D2: US 2003/059654 A1 (HSU MICHAEL S ET AL) 27 March 2003 (2003-03-27)			
2. Independent claim 1			
2.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 lacks novelty (PCT Article 33(2)).			
Document D1 discloses (the references between parentheses refer to that document):			
a motor vehicle (abstract, "for a vehicle") with at least one electromotor (column 8, line 7, fig. 7, "traction motor 5"), an energy accumulator (column 8, line 20, fig. 7, "battery 1") for supplying drive			

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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energy to the electromotor, with a plug connector connected to the energy accumulator (column 8, line 19, fig. 7, "input port 7"), for connection to a power source, and with a control system (column 8, line 13, fig. 7, "microcontroller 3") for controlling the power flow from the power source to the energy accumulator, the control system allowing the power to flow from the energy accumulator to the power source, and a power converter (column 8, line 12, fig. 7, "converter 2") being provided inside or outside the vehicle, by means of which the electrical energy of the energy accumulator can be fed into the power source in the form of alternating current (column 8, lines 39 and 40, "...batteries can be ... indeed discharged into the AC source").

2.2 All the features of claim 1 are therefore known from the disclosure of D1. The subject matter of claim 1 thus lacks novelty (PCT Article 33(1) and (2)).

3. Independent claim 6

3.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 6 lacks novelty (PCT Article 33(2)).

3.2 The subject matter of claim 6 is covered by that

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>of claim 1. The comments made above therefore also apply to the subject matter of claim 6.</p> <p>3.3 All the features of claim 6 are therefore known from the disclosure of D1. The subject matter of claim 6 thus lacks novelty (PCT Article 33(1) and (2)).</p> <p>4. Dependent claims 2-4, 7 and 9</p> <p>4.1 Claims 2-4, 7 and 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step.</p>



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## Box No. VI Certain documents cited

## 1. Certain published documents (Rule 70.10)

Application No.  
Patent No.Publication date  
(day/month/year)Filing date  
(day/month/year)Priority date (valid claim)  
(day/month/year)

## 2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure  
(day/month/year)Date of written disclosure  
referring to non-written disclosure  
(day/month/year)

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

**Box I.**

1. The amended claims 1 to 13 submitted with the letter of 6 May 2005 correspond essentially to the originally filed claims, the subject matter of the original claims 2 and 8 being included in each of independent claims 1 and 5.

As has already been noted by the International Searching Authority, the original claims 1 to 15 do not meet the PCT requirements in respect of unity of invention. In particular, the subject matter of the original claims 1 and 6 on the one hand and that of the original claim 8 on the other hand belong to different groups of inventions.

The applicant has not paid any additional search fees in response to the invitation to do so. The international search report was therefore drafted on the basis of the first invention only (claims 1-4, 6, 7, 9, 12, 13 and 15).

Pursuant to PCT Rule 66.1(e), amended claims which relate to inventions in respect of which no search has been carried out are not taken into consideration in the international preliminary examination.

The amended claims 1 to 13 submitted with the letter of 6 May 2005 all contain the subject

## Supplemental Box

matter of the originally submitted claim 8, which belongs to the second invention. No search fees were paid in relation to the second invention and therefore no search was carried out in respect of the second invention.

Consequently, pursuant to PCT Rule 66.1(e), the amended claims 1 to 13 are not taken into consideration for the purposes of international preliminary examination.

This report was therefore drafted on the basis of the originally submitted claims 1 to 15.

**Box IV.**

1. The different inventions are:

1.1 Invention 1, claims 1-4, 6, 7, 9, 12, 13 and 15

Vehicle with a drive system and an accumulator connected thereto, and with a connection for a power supply, wherein the accumulator is linked to a control system by means of which the accumulator can be discharged in a controlled manner when connected to the electric power supply and the electric energy can be channelled into the electric power supply.

## Supplemental Box

1.2 Invention 2, claims 5 and 8

Method for controlling the power flow between an energy accumulator and a power supply, wherein the power is allowed to flow from the power supply into the energy accumulator during specifiable first time segments, and from the energy accumulator into the power supply during specifiable second time segments.

1.3 Invention 3, claims 10 and 11

Power supply with a plurality of connections.

1.4 Invention 4, claim 14

Vehicle with a drive system and an accumulator connected thereto, and with a connection for a power supply, wherein the accumulator is linked to a control system by means of which the accumulator can be discharged in a controlled manner when connected to the electric power supply, the vehicle having an electrical connector plug with an earth wire, by means of which vehicle data can be exchanged over a data network operated by the power supply company and other data relating to the data network can be fed in.

2. The above inventions are not so linked as to form

## Supplemental Box

a single general inventive concept (PCT Rule 13.1) for the following reasons:

- 2.1 Inventions 1 to 4 clearly relate to different subjects. No single general inventive concept in the sense of PCT Rule 13.1 can be found in the application. The different features of the four ascertained inventions concern solutions to different technical problems.
- 2.2 The first invention is directed to a vehicle with a drive system and an accumulator, the contents of which can be fed into an electric power supply. The second invention concerns a method for controlling the power flow from an accumulator into a power supply and from a power supply into an accumulator in such a way as to optimise the costs involved. The third invention concerns a power supply with a plurality of connections. Finally, a fourth invention is claimed relating to a vehicle with a connector plug, via the earth wire of which data can be exchanged between the vehicle and an electric power supply.
- 2.3 The four inventions clearly concern solutions to different technical problems. The four inventions are therefore not so linked as to form a single general inventive concept (PCT Rule 13.1).
3. The application concerns a number of inventions or groups of inventions in the sense of PCT Rule 13.1. These have been divided as described above.

## Supplemental Box

If the applicant were to pay additional fees for one (or more) group(s) of inventions for which a search has not yet been carried out, the additional search(es) could reveal further prior art which could retrospectively reveal a further lack of unity of invention within one (or more) of the groups for which a search has not yet been carried out. In that case, the search would be performed only in relation to the first invention within (each of) the group(s) of inventions for which a lack of unity of invention had been determined. No further invitation to pay additional fees will be made. This is owing to the fact that PCT Article 17(3) states that the International Searching Authority shall establish the international search report on those parts of the international application which relate to the invention first mentioned in the claims ("main invention") and on those parts which relate to inventions in respect of which additional fees were paid. Neither the PCT Treaty nor the PCT Guidelines contains a legal requirement to issue further invitations to pay additional search fees (W17/00, point 11 and W1/97, points 11-16).